Dear Dr. Yool,

Thank you for your comments and we are glad that our contribution is being considered for publication in Geoscientific Model Development. Below we explain how we have addressed your points (quoted in italics).

*Line 115:* “versions” should be “version”
Done.

*Line 204:* correct to “… from adjacent areas are characterised …”
Done.

*Line 369-370:* amend to “A trait-based description of zooplankton can help in reducing model complexity …”
Done.

*Line 447:* “my” should be “by”
Done.

*Figure 1:* I believe einsteins are abbreviated as “E” not “Ein”; also, mol photons are often preferred to einsteins
We have now adopted “mol photons” throughout the manuscript.

*Figure 1:* both leftmost panels are rather murky (e.g. coastlines are far less distinct than in the rightmost panels) – has something gone wrong?
Thank you for pointing this out. We have revised the figure using a lighter color for land mass, which produces a clear coastline in all panels.

Also, in the new text around trait-based zooplankton mentioned above (lines 369-376), there could be a little more clarity around why the trait-based approach “reduces complexity”. Perhaps a bracketed remark along the lines of “(i.e. adds size-related functionality without the need for discretely parameterised zooplankton classes)” could be added to the end of the sentence on line 376. Might that help?
Yes, indeed the suggested parenthetical sentence improves the clarity of our original statement. Thanks for your suggestion! We have added it to the latest version of the manuscript.